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ABSTRACT

The social contexts students need to encourage productive collaboration in their writing can be provided by attending to various design features of the English microcomputer laboratory. Collaborative learning offers a powerful alternative to traditional classroom teaching methods and helps students become part of a community that approximates the one most students will eventually write for in business, government, and the professions. Four practical suggestions for the encouragement of productive collaboration aimed at the designers and directors of labs include: (1) common areas (where students can get together and talk or relax) should be provided in the labs; (2) arrange the computers in such a way as to facilitate interaction among students; (3) provide an atmosphere that is conducive to communication and sharing; and (4) staff the labs with students who are enthusiastic, proficient writers. In order to invite collaboration, teachers and staff must communicate, verbally and nonverbally, so that students are encouraged to interact, share, and communicate. (Thirteen references are attached.) (RS)

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**Collaboration and Community Formation
in
English Microcomputer Labs**

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For the past several years, our profession has been concerned with providing social contexts for our students' writing and thinking. We have tried to encourage collaborative learning in an attempt, as Kenneth Bruffee would say, to elicit in our students appropriate ways of talking and writing (84). Indeed, our interest in collaborative learning is witnessed by the number of sessions on the topic offered at this conference: I counted at least 22 in the conference preview.

Similarly, our profession has taken a keen interest in the computer revolution. I would bet a significant number of you here today use computers in your teaching of writing. But even though so many of us are using computers in our teaching, we as a profession are still looking for answers on how we can best use this technology. We look to our professional journals, which appear to be covering computers more frequently, and we look to newly created journals devoted to using computers in the classroom, such as Computers & Composition and Collegiate Microcomputer. And our interest is again evident at this conference: there are over 15 computer related sessions offered.

If computers are the "tools we have been waiting for" and the "tremendous boon to composition teachers," as Ruth Gardner & Jo McGinnis found many of us to believe (87), then perhaps we can use the computer in our efforts to encourage collaborative learning in our students. Specifically, perhaps our English microcomputer labs can provide the environment in which we get our students to interact, to converse, thus "establishing and maintaining the sorts of social contexts, the sorts of community life, that fosters the sorts of conversation [and writing] members of the community [and we as composition teachers] value" (Bruffee, 84).

In this paper, I will focus on how we can provide the social contexts we feel our students need in their writing--how we can encourage productive collaboration--by attending to various design features of our English microcomputer labs. Much of the current research indicates that those of us teaching with computers perceive more peer editing, more student exchange about assigned topics, and more collaboration among our students (Dickinson, 1986; Gardner & McGinnis, 87; Hawisher, 1988; Rodrigues, 1985; Reid, 1985; Selfe & Wahlstrom, 1986). This productive collaboration, however, may not exist or form spontaneously in our labs. But there are efforts we as lab designers and directors can make to provide an environment that encourages collaborative learning among our students.

I define productive collaboration as any work in which students are actively engaged in writing or learning about writing, or any activity that will promote or lead to student interaction and communication about reading and writing. So, for example, for the purposes of this paper, productive collaborative work would include anything from two or more students getting to know each other in the lab to two or more students actively discussing a collaborative paper. While the benefits of the latter are obvious, the prior situation also produces benefits: our students establish the social ties that might lead to future collaboration.

Our interest in collaborative learning is not new. In his essay "Collaborative Learning and the 'Conversation of Mankind,'" Kenneth Bruffee illustrates well our discovery, in the 1970's, of collaborative learning. Our students, although on paper appearing prepared, seemed unprepared for our traditional classroom teaching.

We dealt with this situation by introducing collaborative learning or peer tutoring, peer criticism, and classroom group discussion. We found that our "students' work improved when they got help from peers; peers offering help, furthermore, learned from the students they were helping and from the activity of helping itself" (Bruffee, 84).

Just as important, the collaborative work in which our students were engaged gave them the social context we felt they needed to learn to think and write more effectively. This social constructionist perspective requires that we believe "learning occurs among persons rather than between a person and things" (Bruffee, 1986). As students learn from each other, they become part of a community that fosters the kind of conversation and writing we value and also a community that approximates the one most students will eventually write for in business, government, and the professions (84). Further, the non-competitive collaborative work provides an environment which, according to research and surveys of research (Johnson, 81; Sharan, 80; Slavin, 83), promotes better learning compared to more traditional, competitive classrooms. Collaborative learning, it appears, gives us a powerful alternative to traditional classroom teaching methods.

And now that we have the computer to further reshape our pedagogical strategies, we have the chance to combine these two learning strategies by encouraging collaborative learning in our English microcomputer labs. Gardner and McGinnis found that teachers at several of the ten schools they surveyed responded that students became more active in the writing process when they began using computers. Their conclusion: "Computers offer opportunities for more flexibility of teaching and more variety in teaching activities: peer review, group discussion, and collaboration in thinking as well as writing. The computer lab may become the common room in a large writing program and may result in a new sense of community" (87).

A pilot study I completed in the Center for Computer-Assisted Language Instruction (CCLI) at Michigan Technological University supports the information Gardner and McGinnis obtained from their survey. I found computer labs and the smaller common areas within such labs do indeed support many forms of productive collaboration among students. In three hours of videotaping a small common area within one computer lab, I found students working individually (a precursor to collaboration), in pairs, and in small groups.

In general, common areas, such as those on which I'd like to focus this presentation, are areas in computer labs away from computers, where students can relax, talk, and work on their writing. The particular common area I'd like to talk about is located in the CCLI at Michigan Technological University. It includes a central table, consultants' desk and mailboxes, file cabinets for students' disks, informational bulletin board, and reference bookshelf. The common area is the first part of the lab students encounter when they enter and the last they encounter when they leave. It is also the area where the lab's writing and computer consultants can usually be found.

Individual students using the common area accounted for about 82 percent or 2.5 hours of the three hour taping time. For example, one student used the central table to study for a test,

while another sat at the desk to revise a paper she had just printed. Still another student was in the common area to retrieve a printout.

I call these intrapersonal situations a precursor to collaboration because they are a vital first component. We must make our labs places where students will gather to do their actual writing--their prewriting, brainstorming, and revising. If we can get them to do at least some of their individual work in the lab, for example, reading a short assignment, preparing a presentation, or any of the other tasks I've previously noted, then we have the first component necessary for collaboration: we have students using our labs for tasks other than simple utilitarian task of typing in what they have written elsewhere. .

The next most common situations occurring in the lab were students working in pairs and small groups, which constituted about half of the videotaping time (54 percent or about an hour and a half).¹ Students were commonly seen in pairs and small groups discussing writing matters, CCLI business, or personal matters. For example, two students spent about 15 minutes discussing revisions to a paper they were writing. Another pair talked for about 18 minutes about hardware and software related to our Macintosh computers. Small groups used the common area for discussing revisions to a group paper, preparing for an oral presentation, and talking about non-academic, personal matters.

Our goal in encouraging collaborative work in our labs and the common area, in the words of Bruffee, is to encourage our students to engage in "conversation among themselves at as many points in the writing process as possible . . ." (84). By encouraging our students to gather in the lab to talk and work, we are establishing our labs as a social setting. And as our students become comfortable interacting, in pairs and small groups, they might be more inclined to engage in conversations about their writing and reading, thus establishing in our labs the social contexts we desire. Our next step, to finish the previous Bruffee quote, is to ". . . contrive to ensure that students' conversation about what they read and write is similar in as many ways as possible to what we would like them to eventually read and write" (84). I'll give one method we can use to accomplishing this in just a minute.

So far in this paper, I have talked about collaborative work and its importance in our teaching of composition. I have shown some of the collaboration others have found in their labs and the collaboration we have found in the lab at Michigan Tech. And, several times, I have referred to measures we as lab designers and directors can take to encourage collaborative work in our labs. For the rest of this talk, I'd like to present these measures by offering some practical suggestions² we can use in our English microcomputer labs.

Suggestion One: We should design our labs to include a common area around which students can gather.

Microcomputer labs in their most basic form are rooms filled with tables on which sit computers. While, certainly, collaborative work can occur in even the most basic labs, we might better our chances of establishing the interaction we want in our students if we give them more room to communicate and interact, room to sit and revise a paper or talk with a friend. The common area can provide this room.

Because space is at a premium at our institutions, many of us find it is all we can do to find room for our equipment. But we must fight for this extra space if we want to encourage as much conversation and interaction among our students as possible. Several directors at labs I have visited talked of having elaborate common areas in their ideal, dream labs. Their ideas included having couches and easy chairs in which students could relax and read or revise, softer lights, plenty of table space at which students and groups of students could work, and plenty of shelves to house reference books. I suggest, if we value collaborative learning, then this common area should not be a part of our ideal, dream labs but at least some small part of our most basic English microcomputer labs.

Suggestion Two: We must facilitate interaction among our students by arranging our computers in such a way to encourage communication and sharing.

While traditional computer labs have been designed to minimize collaboration by having computers arranged side-by-side or even in individual cubicles, in our English labs we want to encourage collaboration. If we are to engage our students in conversation at as many points in their writing as possible, then we might arrange our computers in a way that encourages communication and sharing.

One solution used in many labs is to arrange computers in small clusters about the lab. This arrangement produces two positive effects. First, students are angled toward each other, which might encourage students to be more open than if they were oriented either shoulder-to-shoulder or face-to-face. Second, clusters of computers break students into smaller groups in which individual students might be more willing to participate.

Suggestion Three: We must provide in our labs an atmosphere that is conducive to communication and sharing.

Many teachers, when faced with the task of designing the physical room in which their lab is located, turn to the nearest model: the computer labs for number-crunching and programming located in Business and Computer Science departments. I suggest, instead, that we look to ourselves, at the environment in which we would be open to sharing and in which we would do our own writing.

If we do this, we might design English computer labs drastically different from traditional computer labs. One survey of the directors of 36 English microcomputer labs found that many suggest "that the facility not be utilitarian: attention to the aesthetics of the room would help make it more pleasant, attractive, and non-threatening" (Collier, Garand, Parbs, & Morrison, 1987). If we paint our labs warm colors, perhaps add plants and paintings, we create what I think many of us would agree is a warm, creative environment that might just be the encouragement our students need to use our labs and be more open and sharing.

Suggestion Four: We must staff our labs with students who are enthused, proficient writers.

One of the most important and sometimes overlooked details in lab operation is lab staffing. In many labs, staffing is

supervised by the campus computer services organizations, which hire students proficient with computers to oversee lab operation. If, instead, we staff our labs with student writers who are also skilled with computers, we present an environment in which writing is central. Students who have shown they are at least on their way to mastering the discourse we desire can help us to meet our goal, as stated by Bruffee, of "contriving to ensure that our students' conversations about what they read and write are as similar as possible to the way we would like them to read and write" (84). These student writers move us one step closer to creating Bruffee's community of peers by planting the seed from which this community can grow.

In this paper, I've talked about collaboration and how we can develop in our English microcomputer labs the social contexts that we are trying to provide our students. I've given four suggestions that teachers can follow to invite these social contexts and make their labs more inviting to student writers. The common denominator for these suggestions is communication. In order to invite collaboration and sharing among our students, we must communicate, verbally and nonverbally, that we want our students to interact, to share, to communicate. And as lab directors and designers, we must carefully observe what our students communicate back to us, again, verbally and non-verbally, to fine-tune our labs to better meet our goal for increased student collaboration.

ENDNOTES

- * The percentages I have used add to more than 100 percent because some of the activities I noted occurred concurrently.
- 2 These suggestions are based in part on suggestions given in the graduate report I wrote in partial fulfillment of the requirements for a master's degree in rhetoric and technical communication at Michigan Technological University.

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